(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



(43) International Publication Date 13 October 2005 (13.10,2005)

PCT

# (10) International Publication Number WO 2005/094250 A2

Not classified (51) International Patent Classification:

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(21) International Application Number:

PCT/US2004/007903

(81) Designated States (unless otherwise indicated, for every

(22) International Filing Date: 16 March 2004 (16.03.2004) (25) Filing Language:

English

kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,

(26) Publication Language:

English

ZW. (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-

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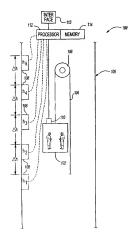
> pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

> > [Continued on next page]

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(54) Title: TENSILE SUPPORT STRENGTH MONITORING SYSTEM AND METHOD



(57) Abstract: A system and method monitoring the health of a support structure for an elevator based on an electrical characteristic, such as resistance, of the support structure and not the temperature of the structure. The resistance of a virgin support structure under the same temperature conditions as the support structure being monitored is calculated and subtracted from the measured resistance of the monitored support structure. The resistance value of the virgin support structure and the monitored support structure may be translated to a reference temperature to simplify calculations and monitoring of the support structure.

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

ance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

For two-letter codes and other abbreviations, refer to the "Guid-

### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

#### Published:

 without international search report and to be republished upon receipt of that report